

# Paddy Farmer

(Job Role)

Qualification Pack: Ref. Id. AGR/Q0101

Sector: Agriculture

Textbook for Class IX

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी  
NCERT

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## FOREWORD

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values, such as self-reliance, creativity and cooperation. Through work, one learns to find one's place in society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in the society. Work involves interaction with material or other people (mostly both), thus, creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and workplace. The NCF–2005 also emphasises on Vocational Education and Training (VET) for all those children who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last resort' option.

As a follow-up of this, NCERT has attempted to infuse work across subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications according to the levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which learners must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised

qualification system covering schools, vocational education and training institutions, technical education institutions, colleges and universities.

It is under this backdrop that Pandit Sundarlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT, has developed learning outcomes based modular curricula for vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOS) for the job role and to promote experiential learning related to the vocation. This will enable the students to acquire necessary skills, knowledge and attitude.

I acknowledge the contribution of the development team, reviewers and all institutions and organisations, which have supported in the development of this textbook.

NCERT welcomes suggestions from students, teachers and parents, which will help us to further improve the quality of the material in subsequent editions.

New Delhi  
June 2018

HRUSHIKESH SENAPATY  
*Director*  
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## ABOUT THE TEXTBOOK

Agriculture is an important part of India's economy. It accounts for about 18 per cent of the country's Gross Domestic Product (GDP) and occupies almost 43 per cent of India's geographical area. The Agriculture Industry employs a large number of people in both the organised and unorganised sectors. The requirement of skilled workforce in this Industry is increasing by the day. Various job roles, such as Paddy Farmer, Solanaceous Crop Cultivator, Tuber Crop Cultivator, Floriculturist–Open Cultivation, Floriculturist–Protected Cultivation, Microirrigation Technician, etc., are in demand by States for producing skilled workers.

A Paddy Farmer specialises in the cultivation of paddy crop as per the practices recommended for a particular agro-climatic zone, type of soil, rainfall pattern and climatic conditions to achieve the desired yield. This textbook for the job role of a Paddy Farmer has been developed to impart knowledge and skills through hands-on-learning experience, which forms a part of experiential learning. It focuses on the learning process of an individual. Therefore, the learning activities are student-centred rather than teacher-centred.

The textbook has been developed with the contribution of subject and industry experts, and academicians. Care has been taken to align the content of the textbook with the National Occupational Standards (NOSs) for the job role so that students acquire necessary knowledge and skills as per the performance criteria mentioned in the respective NOSs of the Qualification Pack (QP). The textbook has also been reviewed by experts to ensure that the content is not only aligned with the NOSs but is also of high quality. The NOSs for the job role of Paddy Farmer covered through this textbook are as follows:

1. AGR/N0101: Seed preparation in paddy
2. AGR/N0102: Land preparation and transplanting in paddy
3. AGR/N0103: Integrated nutrient management in paddy
4. AGR/N0106: Irrigation management in paddy

The textbook has eight Units. Unit 1 gives an introduction to paddy cultivation, its importance, climatic requirements for the cultivation of paddy and paddy growing regions. Unit 2 focuses on land preparation and planting. It includes implements used for land preparation and planting of paddy crop. Unit 3 deals with nursery preparation and transportation of paddy seedlings. Unit 4 throws an insight into the various growth stages of paddy crop. Unit 5 covers the various intercultural operations followed in paddy cultivation. Unit 6 deals with seed preparation, which includes methods of seed production, improved and indigenous rice varieties in India, and traits of rice varieties found here. Unit 7 focuses on water management in paddy. It emphasises on water requirement, methods of irrigation, alternate wetting and drying, and water use efficiency in paddy. Unit 8 deals with integrated nutrient management. It includes soil sampling and analysis, nutrient requirement and its sources, methods and time of fertiliser application, and nutrient deficiency symptoms.

We hope this textbook is useful for teachers and students, who opt for this job role. Suggestions for improving this textbook are welcome.

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The images used in the textbook have been sourced from Creative Commons. Dinesh Kumar of IARI, PUSA, is also thanked for providing the photographs. The photographs have been selected with care and diligence to impart a clearer understanding to learners. Care has been taken not to violate any copyright issue. The images are meant for educational purpose only and are being provided for the use of students and teachers.

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